ENVIRONMENTAL

Fact Sheet



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WMD-SW-28

Post-Closure Care of Landfills

The purpose of this fact sheet is to provide owners of state approved closed landfills information concerning their responsibilities for post-closure care.

Background

Effective October 29, 1997, New Hampshire adopted revised *Solid Waste Rules* regulating solid waste. The rules include Env-Wm 2507.03 "Basic Closure and Post-Closure Requirements" and Env-Wm 2507.05 "Post-Closure Inspections, Monitoring, Maintenance and Reporting Requirements". Under Env-Wm 2507.03 (a), landfills must be closed in accordance with an approved plan that meets the additional standards set forth in Env-Wm 2806 (Additional Closure Requirements). Env-Wm 2507.05 (a) requires a closure monitoring period from the time the capping system is installed to demonstrate the facility has achieved the performance standards specified in Env-Wm 2507.04. At present, this time is assumed to be 30 years. Additional requirements are contained within the *Solid Waste Rules*, which should be throughly reviewed for application to your specific post closure program.

In addition, Subtitle D provides for individual states to become "approved" to implement and enforce the criteria contained in 40 CFR Part 258. DES's Waste Management Division (WMD) submitted an application to USEPA for a "Determination of Adequacy" and was approved on February 14, 1995. A condition of the USEPA approval required the WMD to publish a guidance document (*Guidance Document For The State Permitting Of Municipal Solid Waste Landfills Regulated Under Federal Rules In New Hampshire*) which contains those state permitting requirements under 40 CFR Part 258 that are not contained in the New Hampshire Solid Waste Rules. This was done to make it clear that, in New Hampshire, the permittee or owner/operator who is required by federal law to comply with 40 CFR 258 must comply with both the *New Hampshire Solid Waste Rules* and the current federal criteria for Municipal Solid Waste landfills contained in 40 CFR 258 for an approved state. The "*Guidance Document for*

the Closure of Solid Waste Landfills in New Hampshire" is available for a nominal fee from the DES Public Information and Permitting Office at (603) 271-2975.

Post-Closure Care

Once a landfill is closed, the owner/operator is responsible for a minimum of 30 years to maintain the landfill; make repairs as needed to the final cover; monitor water quality; monitor settling; maintain and monitor the gas control system; manage the leachate collection system; maintain the post-closure groundwater monitoring and surface water management systems; provide financial assurance for the cost of post-closure care; and file an annual report with the WMD. To ensure the proper performance of the closed landfill, it is important that the owner/operator properly maintain the landfill and meet the obligations during the post-closure period. The following information generally describes what is required for the major elements of the post-closure care program.

Repair of Final Cover: The owner/operator shall maintain the integrity of the final cover or "cap" and immediately repair any damage. Any facility damage, malfunction, or sub-standard performance must be reported to the Waste Management Division. Once the grass is well established, it should be mowed at least once during the annual growing season. In addition, the owner/operator must control public access and prevent unauthorized entry to the site by using natural and artificial barriers.

Monitor Water Quality: Sampling of the groundwater and surface water shall be done in accordance with the terms of the Groundwater Management Permit. The requirements for monitoring may be periodically reduced by the Waste Management Division during the post-closure period if conditions at the site merit such action.

Monitor Settling, Slope Stability, and Erosion: The owner/operator must monitor the control points which indicate whether settling, slope instability, or erosion has occurred. Any settling, slope movement, or erosion that exceeds the capping system's design standards or results in a loss of positive drainage or capping system damage must be investigated and repaired.

Maintain and Monitor Gas Control System: The gas control system shall be monitored at least quarterly for ambient air conditions and impacts at the property line. If gas releases are found to exceed the limits specified in the regulations (including the NHDES Landfill Gas Policy), the permittee must initiate the following actions: 1) within seven days of detection, record in the operating record of the facility the methane gas levels detected and describe the procedures taken to protect human life; and 2) within sixty days of detection of the methane gas, a plan shall be developed and implemented for remediation of the methane gas release. The Waste Management Division must also be notified of the plan, and in certain instances, a report must be filed with the Air Resources Division.

Manage the Leachate Collection System: The owner/operator must maintain the leachate collection system and properly manage the liquids until the landfill no longer produces leachate.

Maintain the Groundwater and Surface Water Management Systems: The owner/operator must maintain and repair the storm water run-on/runoff management control system as required by the regulations to ensure that landfills do not cause a discharge of pollutants into groundwater and surface water that exceed the established standards.

Financial Assurance: The owner/operator shall maintain financial assurance in the proper amount based upon the estimated cost of post-closure care performed by a third party.

File Annual Report: The permittee shall file an annual facility report with the Waste Management Division summarizing the facility's performance for the prior year. The report form distributed by WMD must include any repairs made to any of the closure systems, including the capping system, groundwater and surface water management systems, leachate management system, storm water management systems, and gas control system.

Contact

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